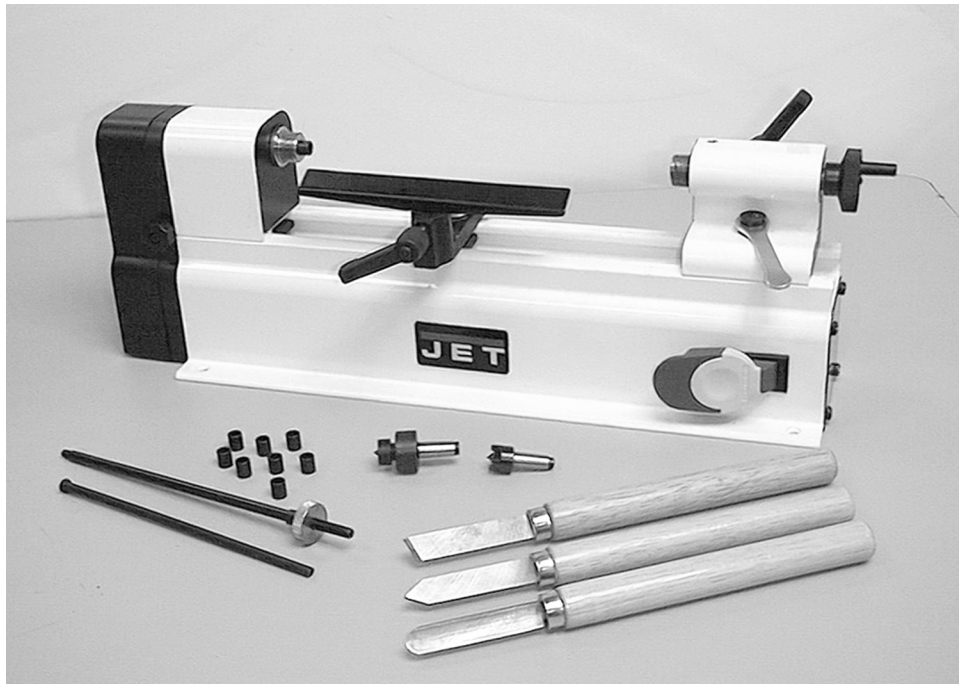


# **J E T**®

## **OWNER'S MANUAL**

### **JPL-358 Pen Lathe**



#### **WMH TOOL GROUP**

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**M-708329 7/03**  
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This manual has been prepared for the owner and operators of a JET JPL-358 Pen Lathe. Its purpose, aside from lathe operation, is to promote safety through the use of accepted operating procedures. To obtain maximum life and efficiency from your Pen Lathe, and to aid in using the product safely, read this manual thoroughly and follow instructions carefully.

## **Warranty & Service**

WMH Tool Group warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Repair Stations located throughout the United States can give you quick service.

In most cases, any one of these WMH Tool Group Repair Stations can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET, Performax, Powermatic or Wilton tools.

For the name of an Authorized Repair Station in your area, call 1-800-274-6848.

## **More Information**

WMH Tool Group is consistently adding new products to the line. For complete, up-to-date product information, check with your local WMH Tool Group distributor or visit [wmhtoolgroup.com](http://wmhtoolgroup.com).

## **Limited Warranty**

WMH Tool Group (including JET, Performax, Powermatic and Wilton brands) makes every effort to assure that its products meet high quality and durability standards and warrants to the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship as follows: 1 YEAR LIMITED WARRANTY ON ALL PRODUCTS UNLESS SPECIFIED OTHERWISE. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, repair or alterations outside our facilities, or to a lack of maintenance.

WMH TOOL GROUP LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD SPECIFIED ABOVE, FROM THE DATE THE PRODUCT WAS PURCHASED AT RETAIL. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. WMH TOOL GROUP SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

To take advantage of this warranty, the product or part must be returned for examination, postage prepaid, to an Authorized Repair Station designated by our office. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, WMH Tool Group will either repair or replace the product, or refund the purchase price if we cannot readily and quickly provide a repair or replacement, if you are willing to accept a refund. WMH Tool Group will return repaired product or replacement at our expense, but if it is determined there is no defect, or that the defect resulted from causes not within the scope of our warranty, then the user must bear the cost of storing and returning the product. This warranty gives you specific legal rights; you may also have other rights, which vary from state to state.

WMH Tool Group sells through distributors only. WMH Tool Group reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever.

 **WARNING**

Read and understand owner's manual before operating pen lathe.

This lathe is designed to turn wood or wood-like products only. Working with other materials could result in fire, injury, or damage to the workpiece.

Tighten all locks before operating.

Remove loose wrenches, adjusting tools, cleaning rags from the tool before turning it on.

Do not use tool in a damp or wet location, or expose to rain. Keep work area well lighted.

Don't force the tool. It will do the job better and safer at the rate for which it was designed.

Use the proper extension cord. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersize cord will cause a drop in line voltage resulting in loss of power and overheating. For runs up to 25 feet, use an 18 AWG or larger gauge cord.

Wear proper apparel. Do not wear loose clothing, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair.

Always use safety glasses. (Normal eyeglasses are only impact resistant; they are NOT safety glasses.) Also use face or dust mask if the cutting operation is dusty.

Keep tools sharp and clean for best and safest performance.

Disconnect tool before servicing or when changing accessories.

Do not operate the tool while under the influence of drugs or alcohol.

Health hazards. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- \* Lead from lead-based paint.
- \* Crystalline silica from bricks and cement and other masonry products.
- \* Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specifically designed to filter out microscopic particles.

**Specifications:**

**JPL-358**

Stock Number.....	708329
Speeds (RPM).....	1600 & 3000
Pen Mandrel.....	MT-0
Swing Over Bed (in.).....	3-1/2
Working Distance Between Centers (in.).....	8
Spindle Thread (T.P.I.).....	3/4 x 16
Headstock & Tailstock Spindle Bore.....	MT-0
Toolrest Length (in.).....	6-5/16
Motor.....	60W, 120V, 60Hz, 0.05A
Weight (lbs.–approx.).....	12.5

**Optional Accessories Available**

**Chisels**

5 Piece Mini Set.....	709163
3 Piece Pen Turning Set.....	709160

**Pen Kits**

**24K Gold      Titanium Gold**

Twist Pen Kit.....	709004.....	709010
Plunger Type Pencil Kit.....	709005.....	709011
Mont Blanc Style Pen Kit.....	709006.....	709015
Mont Blanc Style Letter Opener.....	709007.....	709013

Wood Blanks Exotic Hardwoods (5 piece).....	709021
Drill Bit 7mm.....	709123
Wax Pen Finishing Kit.....	709019
Insta-Cure Glue.....	709020
Pens from the Woodlathe Book.....	709123

The specifications in this manual are given as general information and are not binding. WMH Tool Group reserves the right to effect, at any time and without prior notice, changes or alterations to parts, fittings, and necessary equipment deemed necessary for any reason whatsoever.

## Electrical Requirements

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. The JPL-358 Pen Lathe is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be inserted into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor, with insulation having an outer surface that is green with or without yellow stripes, is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only three wire extension cords that have three-prong grounding plugs and three-pole receptacles that accept the tool's plug.\*

Repair or replace a damaged or worn cord immediately.

This tool is intended for use on a circuit that has an outlet like the one in illustration A of Figure 1. The tool has a grounding plug like the grounding plug in illustration A. A temporary adapter, which looks like the adapter in illustration B, may be used to connect this plug to a two-pole receptacle, as shown in illustration B, if a properly grounded outlet is not available.\*\* The temporary adapter should only be used until a properly grounded outlet can be installed by a qualified electrician. The green colored rigid ear or tab, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box.

\* Canadian electrical codes require extension cords to be certified SJT type or better.

\*\* **Use of an adapter in Canada is not acceptable.**

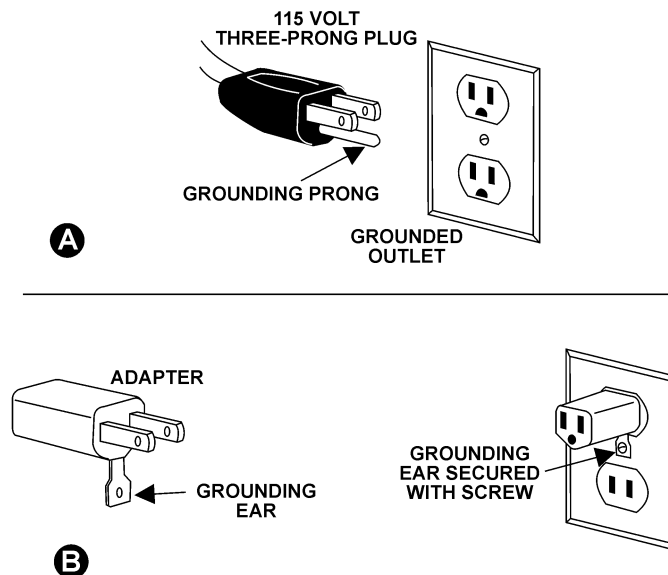


Fig. 1

## Receiving

1. Remove contents from the box.
2. Inspect contents for shipping damage and report damage, if any, to your distributor.
3. Be sure to keep the box and packing material should you need to pack the lathe for moving.
4. Do not clean the lathe with anything other than a damp cloth or a mild solvent. Use of heavy solvents, paint thinner, gasoline, etc. will damage painted surfaces.

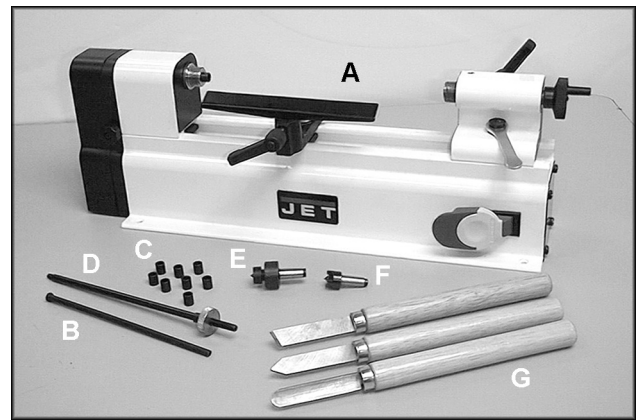


Fig. 2

## Contents of box (Fig. 2):

- 1 Lathe (A)
- 1 Knockout rod (B)
- 9 10mm Bushings (C)
- 1 Pen mandrel (D)
- 1 Live center (E)
- 1 Spur center (F)
- 3 Chisels – skew, parting, domed scraper (G)
- 1 Goggles
- 1 Owner's manual
- 1 Warranty card

## Assembly

The JPL-358 is fully assembled and comes ready to use right out of the box. However, it is good practice to thoroughly check the tool for loose fasteners, handles, etc. before use.

Four holes are provided in the base of the lathe for bolting it to a table.

## Adjustments

### Tailstock

Turn handwheel (A, Fig. 3) clockwise to move tailstock spindle forward; counterclockwise to retract tailstock spindle. To lock the spindle, use the lever (B, Fig. 3).

Loosen the tailstock with the attached wrench (C, Fig. 3) and slide tailstock to desired position. Retighten with wrench.

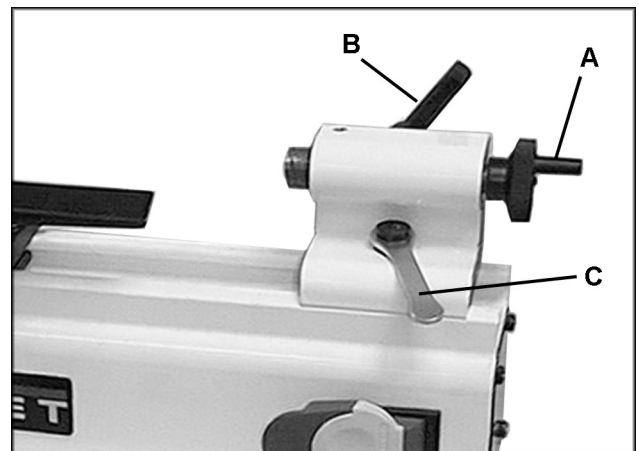


Fig. 3

## Tool Rest

Position the tool rest as close to the workpiece as possible. It should be slightly above the center line of the workpiece.

Loosen the tool rest with the attached wrench (D, fig. 4) and slide tool rest to desired position. Retighten with wrench when finished with adjustment.

Adjust the height of the tool rest by loosening the lever (E, Fig. 4). Tighten the lever when finished adjusting. NOTE: The lever is spring loaded; simply pull up on it, rotate it on the pin, and release.

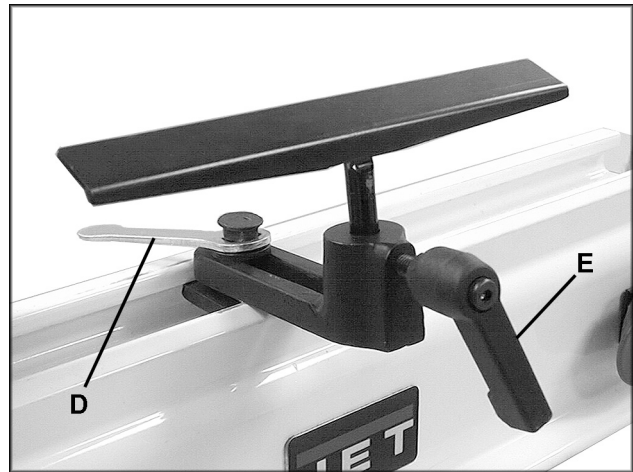


Fig. 4

## Switch Safety Feature

When the switch is in “off” position, a part of the switch can be pulled out (Fig. 5) to prevent accidental starting of the lathe. The piece must be re-inserted before operating the lathe.

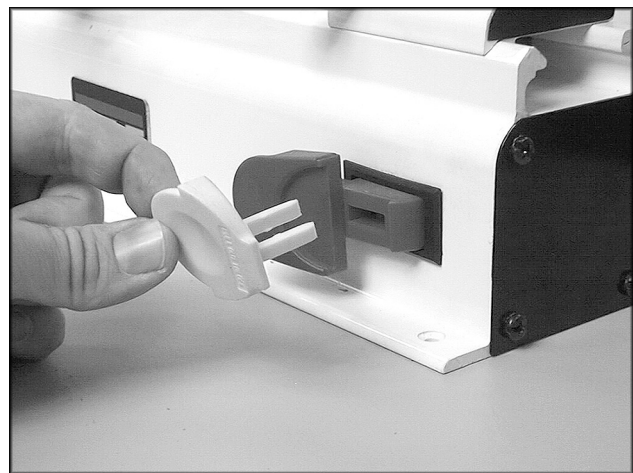


Fig. 5

## Belt Tension

1. To adjust tension of the drive belt, open the cover by turning the knob (A, Fig. 6) clockwise.
2. Loosen the screw (C, Fig. 6) using a hex wrench.
3. Slide the bearing (B, Fig. 6) left to increase tension, right to decrease tension.

## Belt Replacement

1. To replace the drive belt, open the cover by turning the knob (A, Fig. 6) clockwise.
2. Loosen the screw (C, Fig. 6) using a hex wrench and slide the bearing (B, Fig. 6) to the right.
3. Remove the old belt and install new one around the pulleys.
4. Re-tension the belt and close the cover.

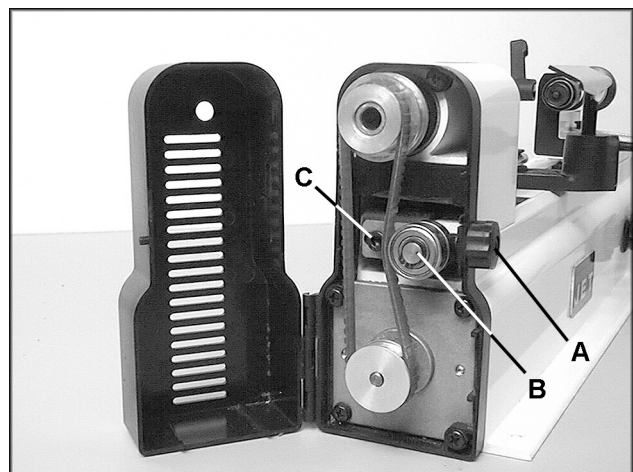


Fig. 6

## Installing & Removing Live Center

1. Clean the tapered shank of the live center (A, Fig. 7) and the inside of the quill (B, Fig. 7) on the tailstock.

**CAUTION**  
Failure to clean the live center and quill can result in separation of the two, which can result in damage to the workpiece and possible injury.

2. Install live center into the tailstock.
3. To remove the live center, loosen lever (C, Fig. 7), and turn handwheel (D, Fig. 7) counter-clockwise until the live center ejects from the quill.

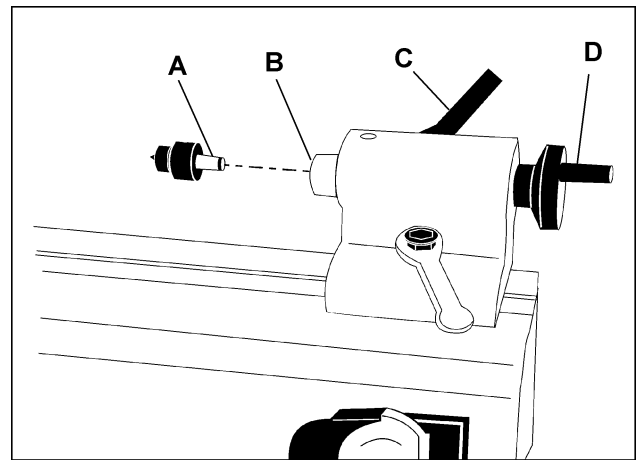


Fig. 7

## Installing & Removing Spur Center

1. Clean the shank of the spur center (A, Fig. 8) and the inside of the headstock spindle (B, Fig. 8).

**CAUTION**  
Failure to clean the spur center and spindle can result in separation of the two, which can result in damage to the workpiece and possible injury.

2. Insert the spur center into the spindle.
3. To remove the spur center, insert the knockout rod (C, Fig. 9) through the hole as shown and push out the spindle. NOTE: Use your other hand to catch the spindle as it falls, to prevent damage to the tip.

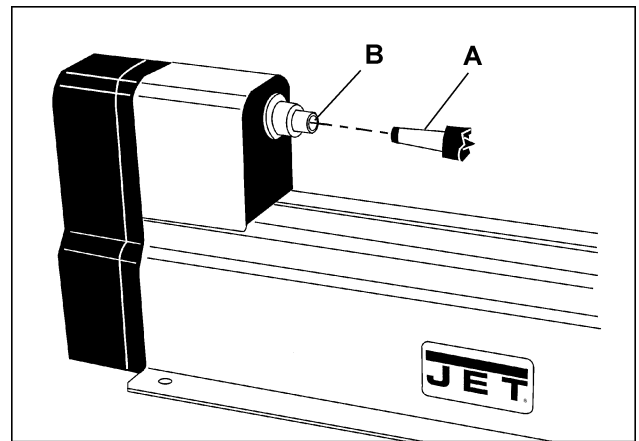


Fig. 8

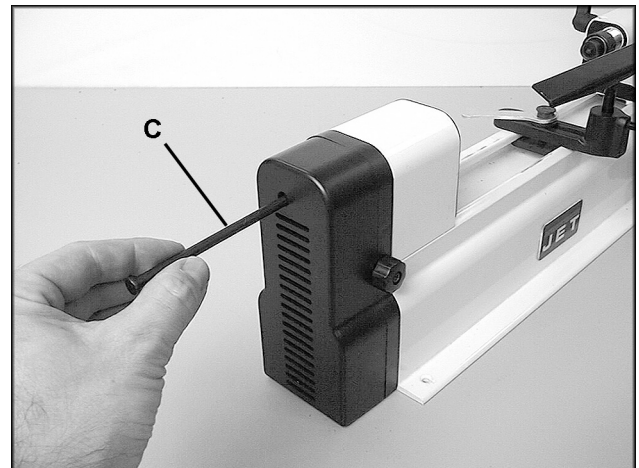


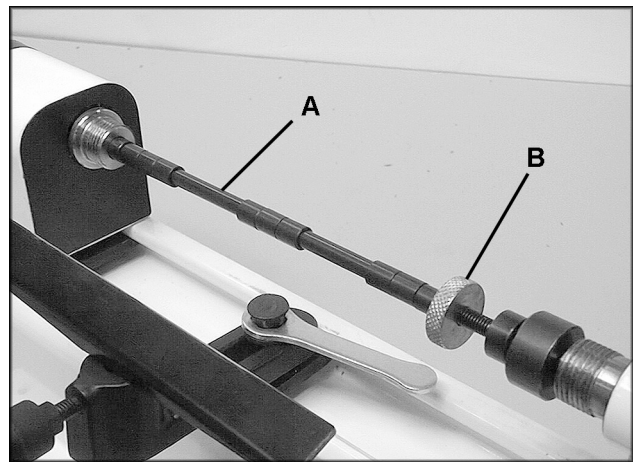
Fig. 9



## Installing Pen Mandrel

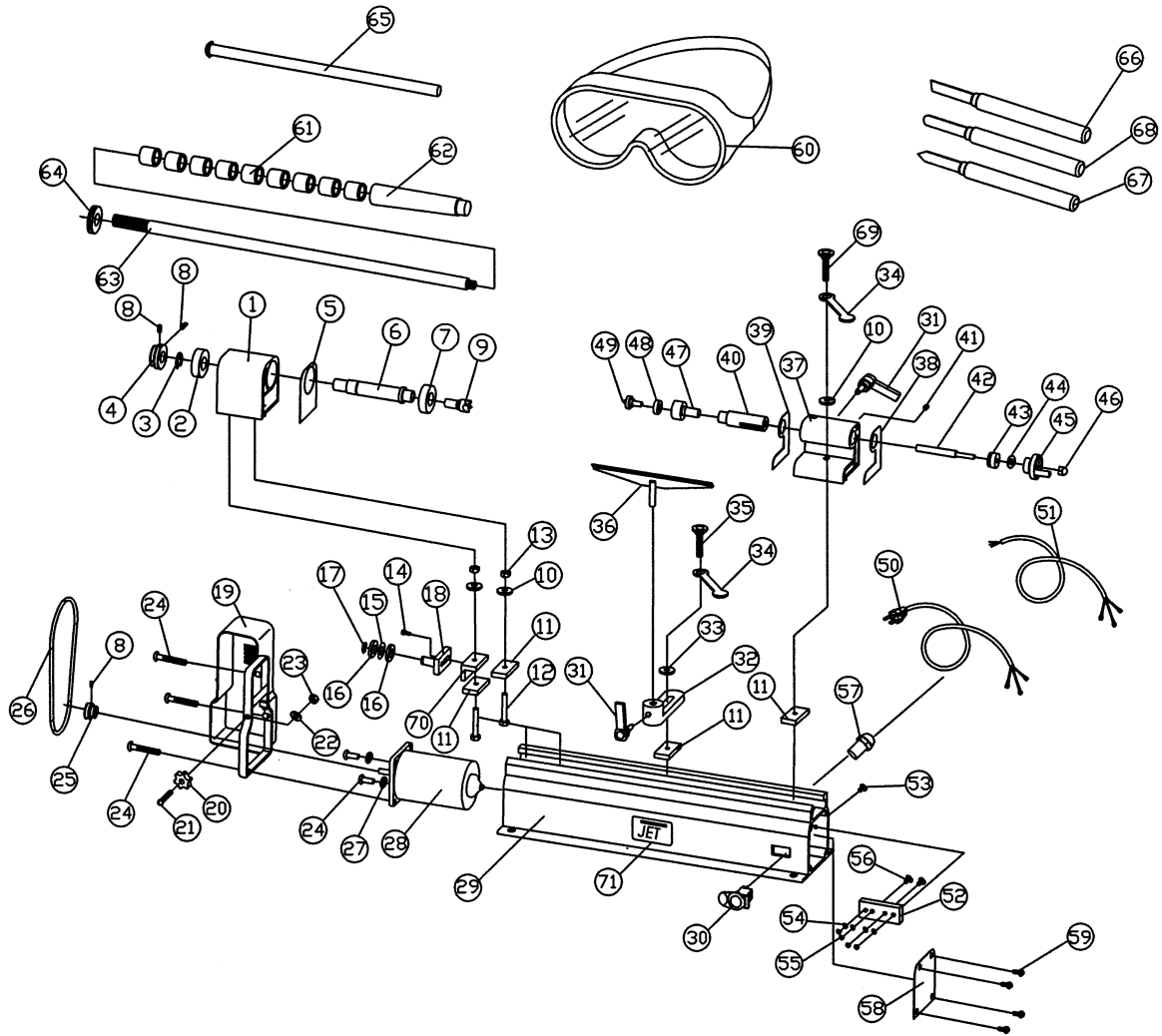
Screw the mandrel (A, Fig. 10) into the threads in the headstock spindle and place the other end on the tip of the live center of the tailstock as shown. The barrel(s) of a pen can be placed between bushings, and held snug on the mandrel by the knurled nut (B, Fig. 10).

If you are new to the practice of pen turning, a book entitled "Pens from the Wood Lathe" (stock # 709123) will demonstrate techniques and tips on turning, and is available from WMH Tool Group. Complete supplies for pen turning are also offered – see page 4.



**Fig. 10**

# Parts Breakdown for JPL-358 Pen Lathe



## Parts List for JPL-358 Pen Lathe

Index No.	Part No.	Description	Size	Quantity
	JPL358-HA.....	Headstock Assembly (Items 1 thru 8).....		1
1.....	JPL358-101.....	Headstock .....		1
2.....	BB-6003ZZ .....	Ball Bearing.....	6003ZZ .....	1
3.....	JPL358-103.....	C-Ring.....	S-17 .....	1
4.....	JPL358-104.....	Spindle Pulley.....		1
5.....	JPL358-105.....	End Cover .....		1
6.....	JPL358-106.....	Main Spindle.....		1
7.....	BB-6003VV .....	Ball Bearing.....	6003VV .....	1
8.....	TS-1521031 .....	Socket Set Screw .....	M4x0.7Px8.....	3
9.....	JPL358-109.....	Spur Center .....		1
10.....	JPL358-110.....	Flat Washer.....	M6x16D .....	3
11.....	JPL358-111.....	Connect Plate.....		4
12.....	TS-1482061 .....	Hex Cap Screw.....	M6x1.0Px30.....	2
13.....	TS-1540041 .....	Hex Nut .....	M6x1.0x30 .....	2
14.....	TS-1502021 .....	Socket Head Cap Screw.....	M5x0.8Px10.....	1
15.....	TS-1550061 .....	Flat Washer.....	M8 .....	1
16.....	BB-608ZZ .....	Ball Bearing.....	608ZZ .....	2
17.....	JPL358-117.....	C-Ring.....	S-8 .....	1
18.....	JPL358-118.....	Joint Plate .....		1
19.....	JPL358-119.....	Pulley Cover.....		1
20.....	JPL358-120.....	Knob.....		1
21.....	TS-2284202 .....	Phillips Pan Head Machine Screw .....	M4x0.7Px20.....	1
22.....	TS-1550021 .....	Flat Washer.....	M4 .....	1
23.....	TS-1541001 .....	Nylon Nut .....	M4x0.7P .....	1
24.....	TS-2285162 .....	Phillips Pan Head Machine Screw .....	M5x0.8Px16.....	5
25.....	JPL358-125.....	Motor Pulley .....		1
26.....	JPL358-126.....	Poly-V Belt .....	112H.....	1
27.....	TS-2361041 .....	Lock Washer .....	M4 .....	2
28.....	JPL358-128.....	Motor.....		1
29.....	JPL358-129.....	Bed.....		1
30.....	JPL358-130.....	Switch.....		1
31.....	JPL358-131.....	Handle Lock .....		2
32.....	JPL358-132.....	Tool Rest Base .....		1
33.....	JPL358-133.....	Flat Washer.....	M6x19D .....	1
34.....	JPL358-134.....	Special Wrench.....		2
35.....	JPL358-135.....	Bolt.....	M6x1.0x25 .....	1
36.....	JPL358-136.....	Tool Rest.....		1
37.....	JPL358-137.....	Tailstock.....		1
38.....	JPL358-138.....	Cover .....		1
39.....	JPL358-139.....	Cover .....		1
40.....	JPL358-140.....	Quill.....		1
41.....	JPL358-141.....	Threaded Stud.....	M6x1.0Px14.....	1
42.....	JPL358-142.....	Lead Screw.....		1
43.....	JPL358-143.....	Bush.....		1
44.....	JPL358-144.....	Copper Washer .....		1
45.....	JPL358-145.....	Handwheel.....		1
46.....	TS-2331051 .....	Cap Nut.....	M5x0.8.....	1

**Parts List for JPL-358 Pen Lathe (continued)**

<b>Index No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Size</b>	<b>Qty.</b>
	JPL358-LCK	Live Center Kit (Items 47 thru 49)		1
47	JPL358-147	Live Center Body		1
48	BB-626VV	Ball Bearing	626VV	1
49	JPL358-149	Tip		1
50	JPL358-150	Power Cord		1
51	JPL358-151	Motor Cord		1
52	JPL358-152	Copper Plate		1
53	TS-1532042	Phillips Pan Head Machine Screw	M4x0.7Px12	2
54	JPL358-154	Star Washer	M4	4
55	TS-1540021	Hex Nut	M4x0.7P	4
56	TS-1532032	Pan Head Screw	M4x0.7Px10	2
57	JPL358-157	Clamp		1
58	JPL358-158	Cover		1
59	TS-1533032	Phillips Pan Head Machine Screw	M5x0.8Px10	4
60	JML-79	Goggles		1
	JPL358-PMA	Pen Mandrel Assembly (Items 61 thru 64)		1
61	JPL358-161	Spacer		9
62	JPL358-162	Taper		1
63	JPL358-163	Shaft		1
64	JPL358-164	Lock Nut		1
65	JPL358-165	Knockout Rod		1
66	JPL358-166	Skew Chisel		1
67	JPL358-167	Parting Chisel		1
68	JPL358-168	Domed Scraper Chisel		1
69	JPL358-169	Bolt	M6x1.0x30	1
70	JPL358-170	L Plate		1
71	JPL358-171	JET Logo		1
72	JPL358-172	I.D Label		1
73	JPL358-173	Warning Label		1